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NOTICE OF ALLOWANCE AND FEE(S) DUE

23995 7590 RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON DC 20005 07/02/2009

EXAMINER PERRY, ANTHONY T PAPER NUMBER ARTHNIT

2870

DATE MAILED: 07/02/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,005	12/14/2005	Hiroshi Kimura	FEC 143NP	7011

TITLE OF INVENTION: ORGANIC EL DEVICE AND ORGANIC EL PANEL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/02/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying paper, Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.				
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WASHINGTON	N, DC 20005						(Depositor's name)	
							(Signature)	
			L				(Date)	
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	10/02/2009	
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PERRY, AN		2879	313-506000	_				
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PTO/SB/47; Rev 03-0 Number is required.	ication (or "Fee Address)2 or more recent) attach	ed. Use of a Customer	2 registered patent att listed, no name will b	ornevs or agents. It	no nar	ne is 3		
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or t	ype)				
PLEASE NOTE: Uni	less an assignee is ident	ified below, no assignee	data will appear on the	patent. If an assign	nee is i	dentified below, the de	ocument has been filed for	
(A) NAME OF ASSI		action of this form is .ve	(B) RESIDENCE: (CIT					
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual C	orporat	ion or other private gro	up entity 🔲 Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Pl	ase first reapply a	ny pre	viously paid issue fee	shown above)	
Issue Fee	vo small entity discount	nermitted)	A check is enclosed. Payment by credit co	ard Form PTO-203	R ic att	ached		
Advance Order -			The Director is herel	ov authorized to cha	rge the	required fee(s), any det	ficiency, or credit any	
5. Change in Entity Sta	tue (form status indicate	d about)	overpayment, to Dep	osit Account Numb	er	(enclose a	extra copy of this form).	
	s SMALL ENTITY state		b. Applicant is no lo	nger claiming SMA	LLEN	TITY status. See 37 CF	R 1.27(g)(2).	
NOTE: The Issue Fee an	d Publication Fee (if req	uired) will not be accepte					e assignee or other party in	
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Authorized Signature				Date				
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10/520,005		12/14/2005	Hiroshi Kimura	FEC 143NP	7011	
23995	7590	07/02/2009		EXAMINER		
RABIN & I	RABIN & Berdo, PC			PERRY, ANTHONY T		
	1101 14TH STREET, NW			ART UNIT	PAPER NUMBER	
SUITE 500 WASHINGTON, DC 20005				2879 DATE MAILED: 07/02/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 413 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 413 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/520 005 KIMURA, HIROSHI Notice of Allowability Examiner Art Unit ANTHONY T PERRY 2879 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed 3/27/09. The allowed claim(s) is/are 11-19 and 21-30. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

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DETAILED ACTION

Response to Amendment

The Amendment filed on 3/27/09, has been entered and acknowledged by the Examiner.

Allowable Subject Matter

· An organic electroluminescent device comprising: a metal electrode; a

Claims 11-19 and 21-30 are allowed.

The following is an examiner's statement of reasons for allowance:

Prior art of record fails to disclose or fairly suggest:

transparent electrode; a transparent electrically conductive film on a surface of the metal electrode, on the organic electroluminescent light-emitting layer side thereof; and a first means, disposed between the organic electroluminescent lightemitting layer and the transparent electrically conductive film, for injecting first carriers and transporting the first carriers to the organic electroluminescent light emitting layer, wherein the transparent electrically conductive film has a thickness that satisfies the equation $L=(2n-1)\lambda/4$, wherein L is the optical distance from the organic light-emitting layer to the metal electrode, and λ is the wavelength of light emitted by the organic light-emitting layer, in combination with the remaining claimed limitations as called for in claim 11 (claims 12-13 and 30 are allowable for the same reasons since they are dependent on claim 11). The amendments to the claims overcome the prior art rejection of Beierlein in view of Hosokawa. since Beierlein's transparent electrically conductive layer (28) must now be considered part of the "first means" of independent claim 11 and is therefore not available as the "transparent electrically conductive film" of the claim 11.

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• An organic electroluminescent device wherein the transparent electrically conductive film on a surface of the metal electrode is constituted from a material of one of In₂O₃-ZnO, In₂O₃-SnO₂, ZnO, and SnO₂, containing an impurity of one of CuO, Co, and Ti at a concentration of not more than 1%, and the transparent electrically conductive film absorbs blue light, in combination with the remaining claimed limitations as called for in claim 14 (claims 15-17, 19, and 21 are allowed for the same reasons since they are dependent on claim 14).

· An organic electroluminescent device comprising: a metal electrode; a transparent electrode; a transparent electrically conductive film on a surface of the metal electrode, on the organic electroluminescent light-emitting layer side thereof; and a first means, disposed between the organic electroluminescent lightemitting layer and the transparent electrically conductive film, for injecting first carriers and transporting the first carriers to the organic electroluminescent light emitting layer, wherein light of wavelengths different than the wavelength of light emitted by the organic light-emitting layer is absorbed by at least one of the metal electrode and the transparent electrically conductive film, and only light of the wavelength emitted by the organic electroluminescent light emitting layer is discharged from the transparent electrode; and wherein light other than blue light is absorbed by the metal electrode, and only blue monochrome light from the backlight is reflected by the metal electrode, in combination with the remaining claimed limitations as called for in claim 18. The amendments to the claims overcome the prior art rejection of Beierlein in view of Hosokawa, since Beierlein's transparent electrically conductive layer (28) must now be considered

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part of the "first means" of independent claim 18 and is therefore not available as the "transparent electrically conductive film" of the claim 18.

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- · An organic electroluminescent device comprising: a metal electrode; a transparent electrode; a transparent electrically conductive film on a surface of the metal electrode, on the organic electroluminescent light-emitting layer side thereof; and a first means, disposed between the organic electroluminescent lightemitting layer and the transparent electrically conductive film, for injecting first carriers and transporting the first carriers to the organic electroluminescent light emitting layer, wherein the transparent electrically conductive film has a thickness that satisfies the equation $L=(2n-1)\lambda/4$, wherein L is the optical distance from the organic light-emitting layer to the metal electrode, and λ is the wavelength of light emitted by the organic light-emitting layer, in combination with the remaining claimed limitations as called for in claim 22 (claims 23-27 are allowable for the same reasons since they are dependent on claim 22). The amendments to the claims overcome the prior art rejection of Beierlein in view of Hosokawa, since Beierlein's transparent electrically conductive layer (28) must now be considered part of the "first means" of independent claim 22 and is therefore not available as the "transparent electrically conductive film" of the claim 22.
- An organic electroluminescent device wherein the transparent electrically
 conductive film on a surface of the metal electrode is constituted from a material
 of one of In₂O₃-ZnO, In₂O₃-SnO₂, ZnO, and SnO₂, containing an impurity of one
 of CuO, Co, and Ti at a concentration of not more than 1%, and the transparent
 electrically conductive film absorbs blue light, in combination with the remaining

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claimed limitations as called for in claim 28 (claim 29 is allowable for the same

reasons since it is dependent on claim 28).

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Anthony Perry whose telephone number is (571) 272-2459. The

examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for this

Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system, Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anthony Perry/

Anthony Perry Patent Examiner

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/NIMESHKUMAR D. PATEL/ Supervisory Patent Examiner, Art Unit 2879